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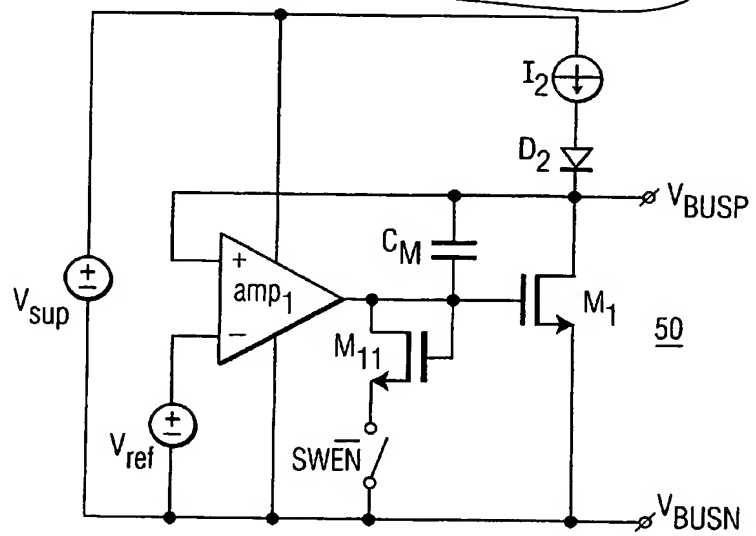
(54) Title: TURN-ON BUS TRANSMITTER WITH CONTROLLED SLEW RATE




(57) Abstract: An amplifier/driver (40) for a bus has an output transistor (M1) that is controlled by a controlled current source (I1). In a quiescent state, the output transistor is configured as part of a current mirror (M1, M11) that maintains a gate-source voltage on the output transistor above the threshold voltage of the output transistor, thereby providing a fast turnon turn-on time. In an active state, the controlled current source provides a substantially constant current to the output transistor to achieve a controlled slew-rate, then reduces the current to the output transistor when a desired output voltage level is achieved. To improve power efficiency, a second controlled current source (I2) provides current to the output load when the desired output voltage level is achieved. To minimize transients, a class-AB control circuit (710) provides a minimum bias current to the output transistor, to prevent it from turning off when the desired output voltage level is achieved.

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